Rapid Sub-basin Assessments

Klamath Basin Sprague River

NRCS Natural Resources Conservation Service

Watershed Planning Services, Davis, California

November 2003

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USDA - Natural Resources Conservation Service

Accelerated Klamath Basin Planning Assistance

for the

Lava Beds/Butte Valley Resource Conservation District, CA

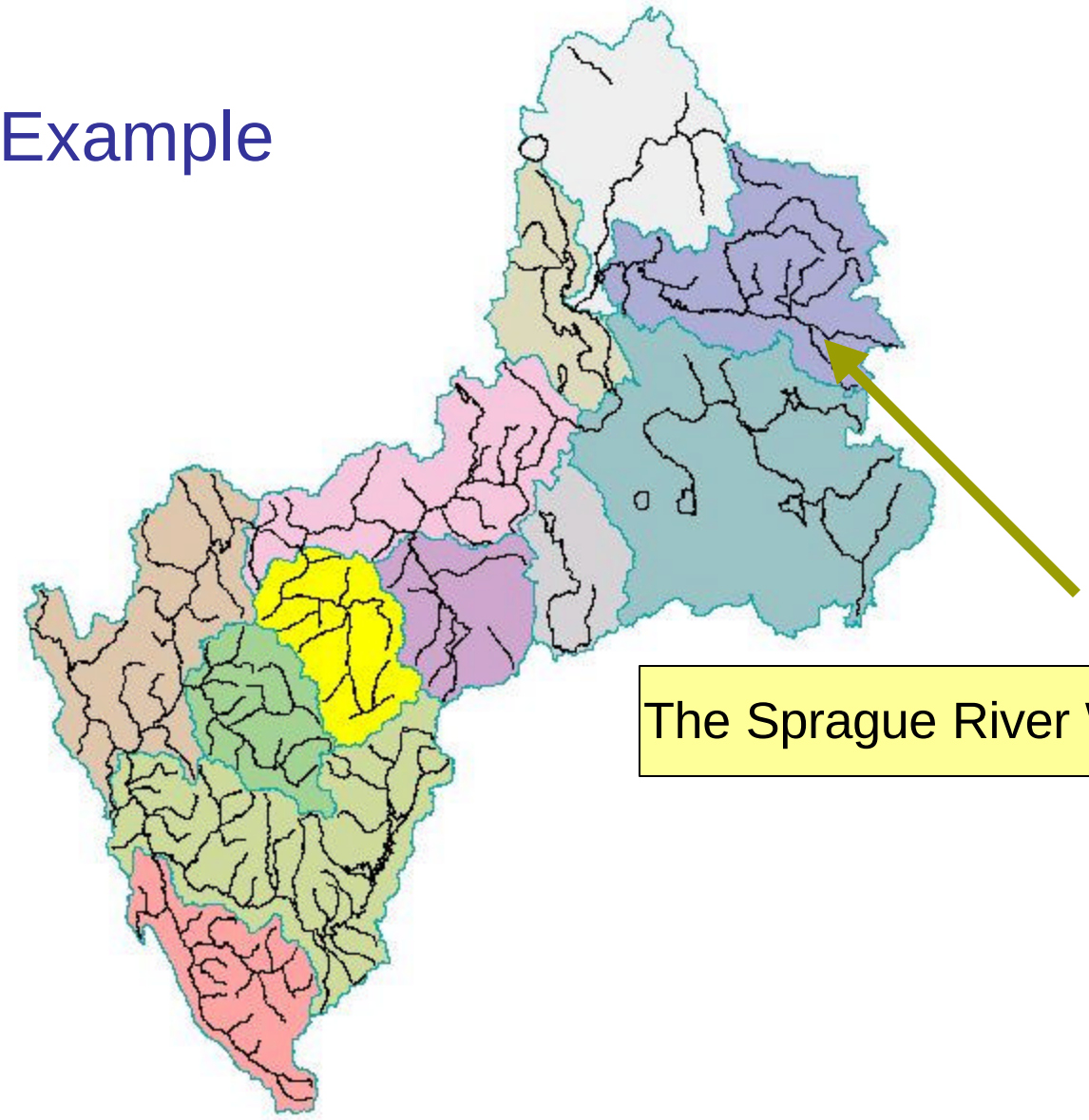
Klamath Soil and Water Conservation District, OR

May, 2002

SPRAGUE RIVER SUBBASIN EVALUATION

GIS organizes Watershed–Level Information

An Example



The Sprague River Watershe

NRCS

Conservation Districts' Goal

A reliable water supply for agriculture in the Upper Klamath Basin.

Conservation Districts' Primary Resource Concerns

- *Water Demand*
- *Water Storage*
- *Water Quality*
- *Habitat & Fish Survival*

rimary Planning Team Objective

ovide the Conservation Districts information with which to:

- Make decisions,
- Set priorities, and
- Determine what the best conservation activities are to achieve their goals and objectives.

tes

- **his is a dynamic planning and decision-making process.**
- **District decisions can be made by subbasin, resource concern or a combination of both.**
- **The goal of this planning effort is not a grand, final plan but to provide Districts with resource information over the course of the next 9 to 12 months.**
- **s planning progresses to implementation, responsibilities will shift to District, local NRCS planners and other field staff.**

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Overview of the Sprague River Subbasin

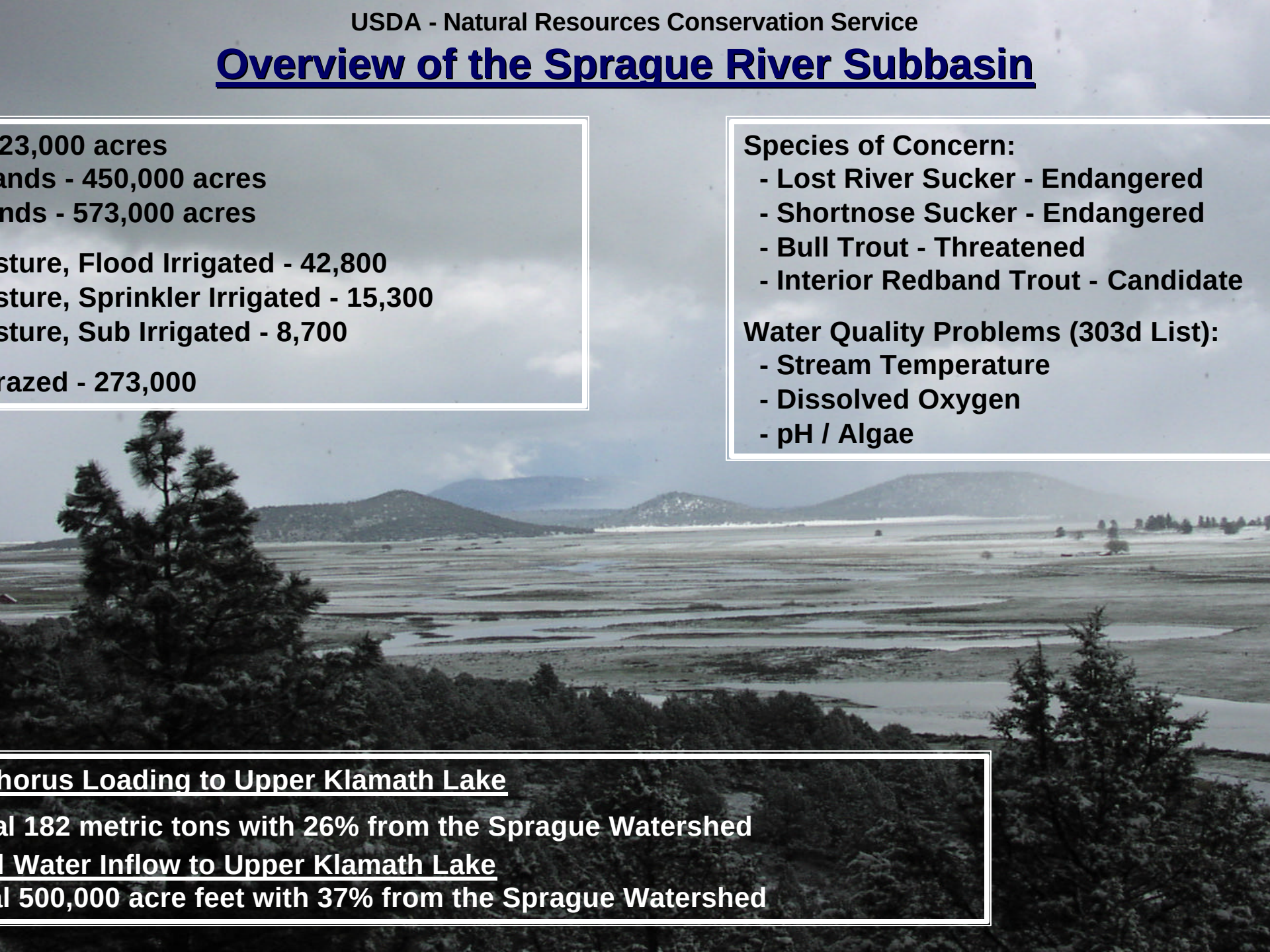
23,000 acres
ands - 450,000 acres
nds - 573,000 acres

sture, Flood Irrigated - 42,800
sture, Sprinkler Irrigated - 15,300
sture, Sub Irrigated - 8,700

razed - 273,000

Species of Concern:
- Lost River Sucker - Endangered
- Shortnose Sucker - Endangered
- Bull Trout - Threatened
- Interior Redband Trout - Candidate

Water Quality Problems (303d List):
- Stream Temperature
- Dissolved Oxygen
- pH / Algae



horus Loading to Upper Klamath Lake

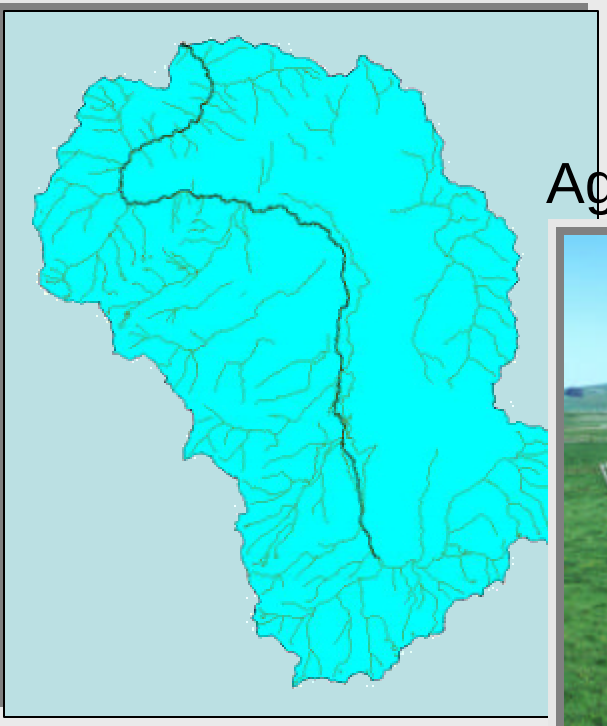
al 182 metric tons with 26% from the Sprague Watershed

l Water Inflow to Upper Klamath Lake

al 500,000 acre feet with 37% from the Sprague Watershed

Watershed Planning Approach: Three Parts

Part 1:
Watershed Information



Part 2:
Agricultural Operation Models

Part 3:
Participation Rates

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SPRAGUE RIVER SUBBASIN EVALUATION
23 May, 2002

River Subbasin Conservation Activities for Irrigated Pasture and Hayland

Conditions		Total acres	Riparian/ Wetland Potential
d Pasture/Hayland		66,650	4,822
gement Unit/Ownership		500	40
rigated Pasture/Hayland		42,614	4,398
er Irrigated Pasture/Hayland		15,307	215
gated Pasture/Hayland		8,729	209
sion (OWRD)		140	

nditions for Irrigated Pasture and Hayland

re & Hayland	Quantity		Costs		Effects				Implementatio		
ces	Unit	Quantity	Additional Investment Cost	Annual O&M and Mngt. Cost	Water Demand	Water Storage	Fish Habitat	WQ	EQIP	WHIP	CREP
Irrigation	Ac.	42,614			-3	-/+	-2	-3			
sion:pump,well or gravi	ea.	170		$221,593							
ery System ditch	ft.	852,280		$1,705							
e-Boundary	mi.	341		$40,909							
ler Irrigation	Ac.	15,307			+1	0	-1	+1			
sion - pump	ea.	61		$220,421							
ery System	ft.	153,070		$30,614							
tion System-Sprinkler	no.	61		$79,351							
e-Boundary	mi.	122		$14,695							
rigated Wet Meadow	Ac.	8,729			0	0	-/+	-/+			
rrigated Wet Meadow	Ac.	8,729		$0							
e-Boundary	mi.	70		$8,380							